

## **10.0 PUBLIC PARTICIPATION**

Public participation in the Master Plan Update occurred in three general ways: through the formation of a project steering committee, via open houses held twice during the planning process, and as part of the user survey.

### **10.1 Steering Committee**

Bloomington Parks and Recreation identified twelve individuals to participate in the planning effort as the Master Plan Update Steering Committee. This committee served as a sounding board; provided comments from diverse points of view; and assured that local priorities, issues, and concerns were received, evaluated, and recorded as part of the plan update process. The twelve individuals represent the Utilities Service Board, Board of Park Commissioners, Indiana University Research and Teaching Preserve, Sycamore Land Trust, Parks and Recreation Environmental Resources Advisory Council, Monroe County Parks and Recreation, Bloomington City Council, South Griffy Neighborhood Association, local biologists, community representatives, neighbors, and general users. Steering committee members and their affiliation are identified in Appendix X.

In total, four steering committee meetings occurred as part of the plan development process. Meetings were held June 28, 2007, September 4, 2007, December 4, 2007, and May 7, 2008. The minutes from each of these meetings are contained in Appendix X. The exchange of information, discussion of study findings, and evaluation of potential management decisions were invaluable in the completion of the Master Plan Update.

### **10.2 Open Houses/Public Meetings**

Two public meetings were held to encourage public input in the Griffy Lake master planning process and content. The first public meeting was held June 28, 2007 from 5 p.m. to 7 p.m. in the Council Chambers at the Showers Building. This meeting consisted of a presentation of the process of the Griffy Lake Master Plan. The public was given the opportunity to provide written and oral comments as well as complete the Griffy Lake User Survey. Comment sheets and maps were provided as supports for written comments. In total, 15 members of the general public and five speakers and/or organizers were in attendance. The comments generated from this meeting were used to align future work in the development of the Griffy Lake Master Plan. The minutes from the first public meeting are found in Appendix X.

The second public meeting was held March 3, 2008. This meeting was held in the form of a public forum whereby a poster session outlined critical topics defined during the elaboration of the study. Comment sheets outlined recommendations corresponding to each topic. The public commented on the comment sheets as well as on maps. Attendees included 50 people, as well as 6 facilitators. Small format posters, initial comment sheets, and comment sheet results and comments are included in Appendix X. Results and comments obtained during this open house were used to target management options and prioritize needs within the Griffy Lake Nature Preserve.

## **11.0 RECOMMENDATION REVIEW AND IMPLEMENTATION GOALS**

The following list details recommendations developed during completion of the Griffy Lake Nature Preserve Master Plan Update. Recommendations are listed in order of appearance in the text and are numbered for purpose of clarity only. Numbers do not reflect recommendation priority. Tables 18 through 20 detail the prioritized recommendations divided into those that reflect capital expenditures (>\$10,000), operational expenditures (<\$10,000), and policy changes.

1. Address areas identified as problem sites during the watershed tour. Complete a feasibility project to identify landowners that are willing to implement projects, determine design details, and develop cost estimates for implementation.
2. Coordinate IURTP-sponsored nature walks with city efforts and advertising to reach a broader audience.
3. Enact cooperation between the IURTP and GLNP to address research issues of concern to both parties.
  - a. Indiana University students can work on questions specific to the GLNP.
  - b. A joint internship program could provide research and learning opportunities for Indiana University, Ivy Tech, and high school students.
  - c. A small grants program could provide financial support for these internships and research projects.
4. Determine the level of cooperation and the correct locations, if any, for trail connections between the IURTP and GLNP.
5. Prepare a coordinated Geographic Information Systems map of GLNP and IURTP.
6. Monitor water quality impacts of areas within the Griffy Lake watershed where septic systems are used to treat residential wastewater. If high nutrient and pathogen concentrations indicate a problem with septic system usage, then work with CBU and the county health department to identify and implement a solution to reduce water quality impacts to Griffy Lake.
7. Limit development and avoid use of areas classified as sensitive habitat areas. These include slopes of 30% or greater, high quality communities including wetlands; wet, mesic, and dry forests; and areas containing old growth (large) trees.
8. Determine, on a case by case basis, the desirability to purchase of properties in the GLNP watershed.
9. Purchase identified properties in the GLNP watershed from willing landowners.
10. Work with the IDNR Division of Nature Preserves to expand the portion of the state-dedicated Griffy Lake Nature Preserve.
11. Work with the county planning department to determine need to address water quality and/or water quantity assessment need with relation to the ECO zone.
12. Control exotic, invasive species using the best-possible method, typically herbicide-based treatments.
  - a. Control exotic species populations that immediately threaten imperiled plant species or high quality natural communities.
  - b. Control exotic and invasive species area perimeters if these areas are increasing in size.
  - c. Seek out and remove minor occurrences of exotic and invasive species that are present within the natural communities before they become major infestations.

- d. Treat exotic and invasive species within the Young (Successional) Mesic Upland Forest.
  - e. Target heavily Degraded/Exotics community to reduce and eventually eliminate exotic species. Plant and seed native vegetation after controlling the exotic and invasive species in these areas.
13. Initiate a study to determine the effects of the deer population on the native plant community. Enact a course of action according to results of the study which could include deer population reduction.
14. Define long term management goals of the forest regarding natural progression.
15. Implement long term management goals for the forest regarding natural progression.
  - a. Depending on the long-term management goals for the property, prescribed burning or selective thinning of trees may be enacted.
  - b. If the long-term management goals include maintaining open areas and keeping Dry-Mesic Upland Forest on terraces from transitioning into Mesic Upland Forest, it is recommended that prescribed burning, and potentially selective thinning of native trees, take place within these communities.
  - c. If the goal is to allow the site to progress naturally into the climax community, then burning is not recommended; it is then recommended that the young forest communities be allowed to naturally transition into more mature forest after exotic species are controlled.
16. Conduct surveys every 3-5 years to monitor specific ETR and Watch List species to ensure that the populations are not decreasing.
17. Preserve areas with ETR and Watch List species in their current successional stage.
18. Avoid disturbance to the habitat of the Cerulean Warbler, which occurs along the Griffy Creek riparian area east of the lake.
19. Periodically (every 3-5 years) revisit the impact of trails, off-trail usage, and other anthropogenic uses on the bird, reptile, amphibian, and mammal communities of GLNP.
20. Pursue opportunities for design-based funding to address shoreline, streambed and bank erosion, and erosion areas throughout the GLNP.
21. Pursue funding to implement shoreline and streambed and bank stabilization as prioritized during the design effort.
22. Begin Canada goose control program.
23. Encourage efforts to reduce soil erosion and runoff from properties throughout the Griffy Lake watershed in order to reduce the transport of mercury and to limit sediment and nutrient loading to the lake with the overall goal of maintaining or improving water quality within Griffy Lake.
24. Continue exotic, invasive aquatic plant monitoring and control methods to limit the negative impacts of exotic species on Griffy Lake.

25. Investigate opportunities to couple lake drawdown efforts for dam repair with aquatic plant community control efforts.
26. Complete a sediment removal plan to investigate options for future dredging of areas of accumulated sediment within Griffy Lake.
27. Implement an education program to inform area residents about the issues associated with exotic, invasive aquatic species and their impact to Griffy Lake as a back up water supply.
28. Encourage the DNR to complete a post-Brazilian elodea fish community assessment of Griffy Lake to determine the impact of treatment on the fish community and the impact that additional post-ramp re-opening fishing pressure may have on the fish community.
29. Complete recommended and/or required water control structure/dam repairs as detailed by MS Consultants, Inc.
30. Install a water level gauge and implement a water level monitoring program so that changes and water level can be tracked and a water level management program implemented
31. Close the dog exercise area located within GLNP and open an official dog park within the Griffy Lake area but outside of Griffy Lake Nature Preserve. Once this move occurs, implement enforcement of current leash and swimming limitations within GLNP.
32. Evaluate and adjust if necessary, boat rental and launch fees yearly. Conduct a periodic scan to assess other Indiana facility fees.
33. Maintain all boats to be readily available for rental, educate boathouse employees to properly care for equipment, regularly renew equipment to satisfy visitor expectations.
34. Determine if paddleboats are a desirable activity at GLNP. If yes, provide a paddleboat on a trial basis for a season to evaluate the coherency of such an investment.
35. Create self-generated funding for GLNP by dedicating revenues generated through programs, boat launches, and rentals to a non-reverting fund.
36. Provide a more open program registration process: provide onsite registration before the activity begins and advanced online registration complemented by onsite registration at the GLNP boathouse handled by a boathouse employee to provide more opportunity for attendance at programs.
37. Provide program posters and fliers at the boathouse.
38. Display a foldable sign at the entry of the parking lot announcing program information.
39. Design and install a kiosk of information near the boathouse.
40. Pursue the formation of a Friends of Griffy group with the funding requirements and duties to be determined by individuals interested in joining said group.

41. Re-landscape and re-plant the boathouse area with native plants to accommodate proper drainage and to deter Canada Geese access in this area.
42. Improve the design and layout of the boathouse parking area.
  - a. Improve safety and walk-ability
  - b. Investigate the installation of a pervious pavement structure to help reduce storm water runoff and preserve the water quality of Griffy Lake.
  - c. Reorganize the number of spaces and use of space in the boathouse parking lot providing a separate parking area for vehicles with boat trailers and a maneuvering area for these vehicles (or traffic flow direction).
43. Improve drainage system in dam parking area to insure the lot remains accessible after rain.
44. Place large limestone blocks or guardrails in the curve at the pull off area between the boathouse parking lot and the base of the hill on Headley Road as well as at the North Shore trailhead. Install bike racks behind the blocks or guardrails.
45. Place large limestone blocks at the Lanam Road entrance to deter ORV access.
46. Improve boardwalk conditions adjacent to the boathouse parking lot to reduce slipperiness and improve overall condition.
47. Designate a safe route for visitors arriving at GLNP on foot or bicycle.
48. Maintain a policy of staying informed about any progress made on Bloomington and Monroe County planned trail opportunities.
49. Ensure collaborative planning for alternative transportation connections by including provisions for infrastructure improvements to accommodate easy connections.
50. Open dialog between BPR and Bloomington Transit to provide public transportation to GLNP.
51. Install traffic calming devices near the entrance of the boathouse parking lot.
52. Reduce speed limit to 20 mph across the causeway.
53. Follow through with the construction of a boardwalk and accessible fishing pier along the South side of the Causeway as recommended in the 1984 Master Plan. This will require a safe pedestrian crossing across Headley Road from the boathouse parking lot.
54. Construct fishing access piers along Griffy Lake's shoreline and limit access to other areas of the shoreline to deter user access and limit shoreline erosion.
55. Provide consistent signage throughout the GLNP providing clear informational/ educational information for users as well as directional information.
56. Provide vandalism resistant signage at different access points indicating that Griffy is open to foot traffic only as per Title 11 of the Municipal Code.

57. Post property: "No hunting".
58. Provide vandalism resistant signage indicating dogs must be on leash at all times.
59. Provide vandalism resistant signage at dam parking area, indicating:
  - a. Dam access (or lack thereof) directions;
  - b. Dog play area and hiking trail access directions;
  - c. That dogs should remain on leash on all trails;
  - d. That dog owners must pick up after their dogs;
  - e. Information about areas undergoing restoration due to erosion; and
  - f. That individuals and animals should stay on trails.
60. Clearly define main trails throughout GLNP, block and obstruct view of secondary paths.
61. Improve stairway access at base of stairs at the creek on the North Shore trail.
62. Redesign and rebuild sections of trail presenting severe erosion and having a grade greater than 10%. Adhere to use of sustainable trail principles as outlined in the report.
  - a. Build retaining walls along the North Shore Trail in steep sections
  - b. A trail's grade should not exceed half the grade of the sideslope.
  - c. The average grade should stay under 10% including grade reversals.
  - d. Maximum sustainable grade should be 15%.
  - e. Frequent grade reversals should be used.
  - f. Out-sloping, bench-cut construction, or excavating soil from the hillside should be used.
  - g. Some standards should be tailored to fit the specific needs of GLNP as related to its particular soil type, controlling invasive species, etc.
63. Maintain trails at a higher level near Meadowood to most appropriately accommodate this user group.
64. Design and build a loop trail along perimeter of GLNP property.
65. Investigate options for a loop trail around Griffy Lake's shoreline. Any pursuit of an official lake loop trail must include infrastructural imperatives such as stairs, boardwalks, and bridges in order to be sustainable.
66. Coordinate Wetlands trail redesign efforts with the design of an ADA trail at GLNP.
67. Provide a pedestrian/ bike specific access path along causeway.
68. Make snake bite kit available at boathouse, provide educational snake identification display.
69. Define a detailed EAP (Emergency Action Plan); an extreme weather policy outlining when to close facilities, if evacuation is necessary, evacuation location, etc.
70. Provide trash containers at heavily used areas of the GLNP.

**Table 18. Capital expenditures recommended to occur at Griffy Lake Nature Preserve from 2009 to 2019.**

#	Action Item	Timeframe (years)	Priority	Outside Funding Options
9	Purchase identified properties in the GLNP watershed from willing landowners	1-5 Ongoing	High	
20	Pursue opportunities for design-based funding to address shoreline, streambed and bank erosion, and erosion areas throughout the GLNP.	1-5	High	LARE, IDEM 319
21	Pursue funding to implement shoreline and streambed and bank stabilization as prioritized during the design effort.	1-5	High	LARE, IDEM 319
26	Complete a sediment removal plan to investigate options for future dredging of areas of accumulated sediment within Griffy Lake.	1-5	Low	LARE
29	Complete recommended and/or required water control structure/dam repairs as detailed by MS Consultants, Inc.	1-5	High	CBU
31	Close the dog exercise area located within GLNP and open an official dog park within the Griffy Lake area but outside of Griffy Lake Nature Preserve. Once this move occurs, implement enforcement of current leash and swimming limitations within GLNP	1-5	High	Private Donors/ Foundation
42	Improve the design and layout of the boathouse parking area	1-5	Medium	
47	Designate a safe route for visitors arriving at GLNP on foot or bicycle.	1-5	High	Transportation Enhancements
53	Follow through with the construction of a boardwalk and accessible fishing pier along the South side of the Causeway as recommended in the 1984 Master Plan. This will require movement of individuals across Headley Road from the boathouse parking lot.	1-5	High	Transportation Enhancements
54	Construct fishing access piers along Griffy Lake's shoreline and limit access to other areas of the shoreline to deter user access and limit shoreline erosion.	1-5	Medium	Recreational Boating and Fishing Foundation, B.A.S.S., National Fish and Wildlife Foundation, Cabela's, Bass Pro
55	Provide consistent signage throughout the GLNP providing clear informational/ educational information for users as well as directional information.	1-5	High	Environmental Education Association of Indiana

#	Action Item	Timeframe (years)	Priority	Outside Funding Options
62	Redesign and rebuild sections of trail presenting severe erosion and having a grade greater than 10%. Adhere to use of sustainable trail principles as outlined in the report	1-5	High, Medium, Low Depending on trail route	Volunteers, University Service Groups
64	Design and build a loop trail along perimeter of GLNP property.	5 +	Low	Recreational Trails Program
65	Investigate options for a loop trail around Griffy Lake's shoreline. Any pursuit of an official lake loop trail must include infrastructural imperatives such as stairs, boardwalks, and bridges in order to be sustainable.	1-5	Medium	Recreational Trails Program
66	Coordinate Wetlands trail redesign efforts with the design of an ADA trail at GLNP.	1-5	High	Recreational Trails Program, ADA grants
67	Provide a pedestrian/ bike specific access path along causeway.	1-5	High	Transportation Enhancements

**Table 19. Operational expenditures recommended to occur at Griffy Lake Nature Preserve from 2009 to 2019.**

#	Action Item	Timeframe (years)	Comments
1	Address areas identified as problem sites during the watershed tour. Complete a feasibility project to identify landowners that are willing to implement projects, determine design details, and develop cost estimates for implementation.	1-2	
2	Coordinate IURTP-sponsored nature walks with city efforts and advertising to reach a broader audience	1-2	
5	Prepare a coordinated Geographic Information Systems map of GLNP and IURTP.	1-2	
6	Monitor water quality impacts of areas within the Griffy Lake watershed where septic systems are used to treat residential wastewater. If high nutrient and pathogen concentrations indicate a problem with septic system usage, then work with CBU and the county health department to identify and implement a solution to reduce water quality impacts to Griffy Lake	1-2	
12	Control exotic, invasive species using the best-possible method, typically herbicide-based treatments. a. Control exotic species populations that immediately threaten imperiled plant species or high quality natural communities. b. Control exotic and invasive species area perimeters	1-2	In Progress; Ongoing



#	Action Item	Timeframe (years)	Comments
	<p>if these areas are increasing in size.</p> <p>c. Seek out and remove minor occurrences of exotic and invasive species that are present within the natural communities before they become major infestations.</p> <p>d. Treat exotic and invasive species within the Young (Successional) Mesic Upland Forest.</p> <p>e. Target heavily Degraded/Exotics community to reduce and eventually eliminate exotic species. Plant and seed native vegetation after controlling the exotic and invasive species in these areas</p>		
13	Initiate a study to determine the effects of the deer population on the native plant community. Enact a course of action according to results of the study which could include deer population reduction	1-2	Coordinate with IURTP
14	Define long term management goals of the forest regarding natural progression	1-2	
15	Implement long term management goals of the forest regarding natural progression	3-5	
16	Conduct surveys every 3-5 years to monitor specific ETR and Watch List species to ensure that the populations are not decreasing	3-5	
19	Periodically (every 3-5 years) revisit the impact of trails, off-trail usage, and other anthropogenic uses on the bird, reptile, amphibian, and mammal communities of GLNP	3-5	
22	Begin Canada goose control program	1-2	
24	Continue exotic, invasive aquatic plant monitoring and control methods to limit the negative impacts of exotic species on Griffy Lake	1-2	In Progress
27	Implement an education program to inform area residents about the issues associated with exotic, invasive aquatic species and their impact to Griffy Lake as a back up water supply	1-2	In Progress
30	Install a water level gauge and implement a water level monitoring program so that changes and water level can be tracked and a water level management program implemented	1-2	
33	Maintain all boats to be readily available for rental, educate boathouse employees to properly care for equipment, regularly renew equipment to satisfy visitor expectations	1-2	In Progress
36	Provide a more open program registration process: provide onsite registration before the activity begins and advanced online registration complemented by onsite registration at the GLNP boathouse handled by a boathouse employee to provide more opportunity for attendance at programs	1-2	In Progress

#	Action Item	Timeframe (years)	Comments
37	Provide program posters and fliers at the boathouse	1-2	In Progress
38	Display a foldable sign at the entry of the parking lot announcing program information	1-2	
39	Design and install a kiosk of information near the boathouse	1-2	In Progress
41	Re-landscape and re-plant the boathouse area with native plants to accommodate proper drainage and to deter Canada Geese access in this area.	1-2	
43	Improve drainage system in dam parking area to insure the lot remains accessible after rain	5 +	
44	Place large limestone blocks or guardrails in the curve at the pull off area between the boathouse parking lot and the base of the hill on Headley Road as well as at the North Shore trailhead. Install bike racks behind the blocks or guardrails	1-2	
45	Place large limestone blocks at the Lanam Road entrance to deter ORV access	3-5	
46	Improve boardwalk conditions adjacent to the boathouse parking lot to reduce slipperiness and improve overall condition	1-2	
51	Install traffic calming devices near the entrance of the boathouse parking lot	1-2	
56	Provide vandalism resistant signage at different access points indicating that Griffy is open to foot traffic only as per Title 11 of the Municipal Code	1-2	
57	Post property: "No hunting"	1-2	
58	Provide vandalism resistant signage indicating dogs must be on leash at all times	1-2	
59	Provide vandalism resistant signage at dam parking area, indicating: <ul style="list-style-type: none"> <li>a. Dam access (or lack thereof) directions;</li> <li>b. Dog play area and hiking trail access directions;</li> <li>c. That dogs should remain on leash on all trails;</li> <li>d. That dog owners must pick up after their dogs;</li> <li>e. Information about areas undergoing restoration due to erosion; and</li> <li>f. That individuals and animals should stay on trails.</li> </ul>	3-5	
60	Clearly define main trails throughout GLNP, block and obstruct view of secondary paths	1-2	
61	Improve stairway access at base of stairs at the creek on the North Shore trail	3-5	
63	Maintain trails at a higher level near Meadowood to most appropriately accommodate this user group	1-2	In Progress
68	Make snake bite kit available at boathouse, provide educational snake identification display	1-2	
69	Define a detailed EAP (Emergency Action Plan); an extreme weather policy outlining when to close facilities, if	1-2	In Progress

#	Action Item	Timeframe (years)	Comments
	evacuation is necessary, evacuation location, etc		
70	Provide trash containers at heavily used areas of the GLNP	1-2	

**Table 20. Policy updates recommended to occur at Griffy Lake Nature Preserve from 2009 to 2019.**

#	Policy Item	Year of Implementation
3	Enact cooperation between the IURTP and GLNP to address research issues of concern to both parties	2009
4	Determine the level of cooperation and the correct locations, if any, for trail connections between the IURTP and GLNP	2009
7	Limit development and avoid use of areas classified as sensitive habitat areas. These include slopes of 30% or greater, high quality communities including wetlands; wet, mesic, and dry forests; and areas containing old growth (large) trees	2009 Ongoing
8	Determine, on a case by case basis, the desirability to purchase of properties in the GLNP watershed	2009 Ongoing
10	Work with the IDNR Division of Nature Preserves to expand the portion of the state-dedicated Griffy Lake Nature Preserve	2009
11	Work with the county planning department to determine need to address water quality and/or water quantity assessment need with relation to the ECO zone	2010
17	Preserve areas with ETR and Watch List species in their current successional stage	2009 Ongoing
18	Avoid disturbance to the habitat of the Cerulean Warbler, which occurs along the Griffy Creek riparian area east of the lake	2009 Ongoing
23	Encourage efforts to reduce soil erosion and runoff from properties throughout the Griffy Lake watershed in order to reduce the transport of mercury and to limit sediment and nutrient loading to the lake with the overall goal of maintaining or improving water quality within Griffy Lake	2010
25	Investigate opportunities to couple lake drawdown efforts for dam repair with aquatic plant community control efforts	2009
28	Encourage the DNR to complete a post-Brazilian elodea fish community assessment of Griffy Lake to determine the impact of treatment on the fish community and the impact that additional post-ramp re-opening fishing pressure may have on the fish community	2010
32	Evaluate and adjust if necessary, boat rental and launch fees yearly. Conduct a periodic scan to assess other Indiana facility fees	2009 Ongoing
34	Determine if paddleboats are a desirable activity at GLNP. If yes, provide a paddleboat on a trial basis for a season to evaluate the coherency of such an investment	2010
35	Create self-generated funding for GLNP by dedicating revenues generated through programs, boat launches, and rentals to a	2009

#	Policy Item	Year of Implementation
	non reverting fund	
40	Pursue the formation of a Friends of Griffy group with the funding requirements and duties to be determined by individuals interested in joining said group	2009
48	Maintain a policy of staying informed about any progress made on Bloomington and Monroe County planned trail opportunities	2009 Ongoing
50	Open dialog between BPR and Bloomington Transit to provide public transportation to GLNP	2009
52	Reduce speed limit to 20 mph across the causeway	2009

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